

**Micronet<sup>®</sup>**  
Faster and Easier Networks



*SP125A*  
PCMCIA Ethernet Adapter  
User's Guide



# User's Guide

## Micronet SP125A PCMCIA Ethernet Adapter

March, 1999

Part No. 50001-111251

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# **1. INTRODUCTION**

## **1.1. ABOUT THIS MANUAL**

This manual will explain how to install and use your Micronet SP125A PCMCIA Ethernet Adapter.

## **1.2. ABOUT MICRONET SP125A**

The Micronet SP125A PCMCIA Ethernet Adapter is a credit-card-size Type II PCMCIA Ethernet adapter that complies with the PCMCIA 2.1 and IEEE 802.3 standards and works with computers that incorporate a compatible interface. The drivers associated with this card allow you to use the most popular Network Operating System(NOS) in the PC environment very easily.

## **1.3. SYSTEM REQUIREMENTS**

- An IBM compatible PC with 386SX or faster processor
- At least one type II PCMCIA socket
- Drivers and utilities provided with this product
- PCMCIA release 2.1 compliant Card Services and Socket Services

- 10BaseT or 10Base2 Ethernet connectivity to your LAN

## 1.4. OPERATING ENVIRONMENTS

- Novell Netware 3.x, 4.x
- Microsoft LAN Manager
- Packet Driver Applications
- Microsoft Windows for Workgroups 3.11
- Microsoft Windows 3.1
- Microsoft Windows NT 3.51, NT 4.0
- Windows 95
- Windows 98
- Lantastic 6.0
- IBM OS/2 Warp Version 3
- Windows 2000

## 1.5. CONTENTS INCLUDED IN THE PACKAGE

- Micronet SP125A PCMCIA Ethernet Adapter
- 10BaseT or 10Base2 media coupler
- A 3-1/2 driver diskette
- User Manual
- A plastic case for SP125A

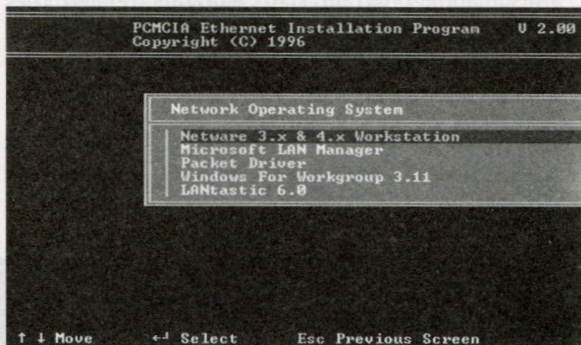
## 2. INSTALLATION

### 2.1. INSTALLING MICRONET SP125A

1. Insert Micronet SP125A PCMCIA Ethernet Adapter into the PCMCIA slot with the 68 pin connector facing the PCMCIA slot and the label facing up.
2. Plug the media coupler into the card's 15 pin connector. Hardware installation is now completed. The SP125A will be powered directly from the PC.
3. Connect the media coupler to the network using the RJ-45/UTP or T-connector/Coaxial cable.

### 2.2. INSTALLING THE SOFTWARE

Plug the driver diskette into the floppy drive and set the current drive to the floppy drive. Then run **INSTALL** to install the real mode drivers such as ODI or NDIS 2.x or Packet Drivers into the target disk.



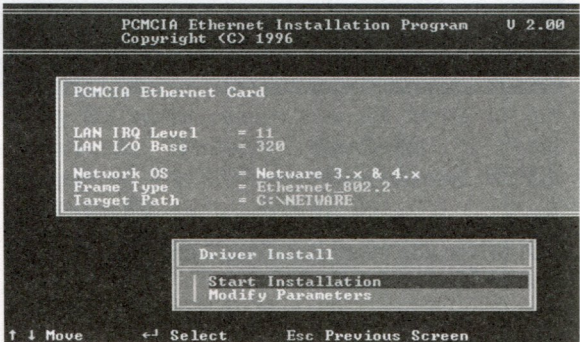
## 2.2.1. Novell Network

There are two methods to install the Netware client ODI driver, the menu installation and Netware 3.12 or 4.x Client installation.

### Menu Installation

- 1.Run **INSTALL.EXE** from the root directory of driver diskette.
- 2.Select "**Netware 3.x and 4.x Workstation**" item from menu.
- 3.If current settings are acceptable, select **Start Installation** and go to step 5. Otherwise, select **Modify Parameters** to make settings changed
- 4.Move cursor to focus on the setting you want to make change and press <Enter>" to select a fit value. When the configurations are set completely, press <Enter> on the **OK** field to exit the screen and go back to step 3.

5. Installation program starts copying related files from diskette to the destination directory and modifies AUTOEXEC.BAT and NET.CFG under user's agreement
6. Now, the installation is completed. Please reboot the computer to make your Netware connection.



If you wanted to install the ODI driver by manual, you may follow the instructions list below.

1. Copy the files LE10ODI.COM and NET.CFG from the path \NETWARE and the file LANEN.EXE from the path \ENABLER in the driver diskette into the Netware client directory containing Novell's LSL.COM, IPXODI.COM and NETx.COM files.

2. Using a text editor to edit the NET.CFG for setting the frame type. In the Netware server the frame type is set to 802.3 for NW3.11 and 802.2 for NW3.12 and NW4.x . The frame type must be set to the same with the server or the client couldn't login to the server.
3. Follow Novell's instructions on using ODI programs. You can substitute the LE10ODI.COM whenever a reference is made to the **Hardware Specific Module**.
4. A typical ODI workstation startup batch file includes:

```
>LANEN      /IRQ=dd /IOP=xxx   Card Enabler
>LSL                ;Link Support Layer Module provided by
                        Novell
>LE10ODI        ;Hardware Specific Module
>IPXODI         ;IPX Protocol Stack Module provided by
                        Novell
>NETx          ;Shell Support Module provided by Novell
>LOGIN
```

## Novell Client Installation

### 1. Run the NetWare Client Install V1.21

- Get the 4 Client disks from the network administrator, or
- Run the \NWCLIENT\INSTALL.EXE in a previous Installation

2. A message appears on the screen asking you whether or not you want the program to perform modifications on your AUTOEXEC.BAT and CONFIG.SYS files.

3. Answer "Yes". The program then modifies your AUTOEXEC.BAT and CONFIG.SYS files accordingly and creates backup copies.
4. The following message appears:
  - Install support for MS Windows? (Y/N):
5. Answer accordingly and provide a path if necessary.
6. The program displays the following:
  - Configure your workstation for backup by a NetWare server running software such as BACKUP? (Y/N):
7. Answer accordingly and provide a path if necessary.
8. Select a driver for your network board.
9. From the driver list, select **Other Drivers**.
10. Go to the Insert the Driver Disk dialog box and specify the path where the ODI driver and INS files reside. For example: C:\ODI.DOS.
11. Press **Enter** and select the target ODI driver.
12. Specify the driver's optional settings.
13. Press F10 to save to new configuration.
14. Highlight "Install press here" and press <Enter> to install.

The program copies the necessary files for NetWare Client. Continue the installation procedure to completion. Upon completion, a new NET.CFG file will be created in your DOS directory. Typically, this file contains the following lines:

```
Link Driver  LE10ODI
#FRAME Ethernet_802.3
FRAME Ethernet_802.2
```

---

15. Copy the file LANEN.EXE from the directory \ENABLER in the driver diskette to Netware Client directory.

16. Edit the STARTNET.BAT by a text editor. Add an running LANDEN command at the beginning of the file. An STARTNET.BAT for the ODI workstation performs as the following

```
LANEN /IOP=nnn /IRQ=n
                        --Card Enabler
SET NWLANGUAGE=ENGLISH
                        --Set NetWare 4.X to English
                        language
LSL                    --Link Support Layer Module
                        provided by Novell
LE10ODI               --Hardware Specific Module
IPXODI                --IPX  Protocol  Stack  Module
                        provided by Novell
VLM                   --DOS Support Module provided by
                        Novell
F:                    --Change to connected device
LOGIN xxx             --Login to file server as user xxx
```

17. Run STARTNET to access the Novell network.

### 2.2.2. MS LAN Manager

1. View the **README.TXT** on the installation diskette in the \NDIS2 directory. Before installing the drivers, please ensure that the **Microsoft LAN Manager** has been installed in the target path.

The installation program will check and modify the **PROTOCOL.INI** file for LAN Manager.

2. Run **INSTALL.EXE** from root directory of driver diskette.
3. Select **Microsoft LAN Manager** item on the menu screen.
4. If current settings are acceptable, select **Start Installation** and go to step 6. Otherwise, select **Modify Parameters** to make setting changed.
5. Move cursor to each field you want to make a change and press <Enter> to select a fit value. When the configuration are set completely, press <Enter> on the **OK** field to exit the screen and go back to step 4.
6. Installation program starts to copy related files from driver diskette to the destination directory and modifies **CONFIG.SYS** and **PROTOCOL.INI** under user's agreement.
7. Please reboot the computer to load driver and start LAN Manager in batch.

PCMCIA Ethernet Installation Program U 2.00  
Copyright (C) 1996

#### PCMCIA Ethernet Card

LAN IRQ Level = 11  
LAN I/O Base = 320  
Network OS = LAN Manager (NDIS 2.0)  
Frame Type = -----  
Target Path = C:\LANMAN.DOS

#### Driver Install

Start Installation  
Modify Parameters

↑ ↓ Move      ← → Select      Esc Previous Screen

### Example of PROTOCOL.INI: used by LAN Manager

#### [PROTMAN]

DRIVERNAME = PROTMAN\$  
DYNAMIC = YES  
PRIORITY = NETBEUI

#### [NETBEUI\_XIF]

Drivername = netbeui\$  
SESSIONS = 6  
NCBS = 12  
BINDINGS = "LE10NDS\_NIF"  
LANABASE = 0

#### [LE10NDS\_NIF]

; protocol.ini session for LAN driver.  
IOADDRESS = 0x320  
INTERRUPT = 11  
DRIVERNAME = LE10NDS\$

### 2.2.3. Packet Driver

- 1.Run **INSTALL.EXE** from root directory of driver diskette.
- 2.Select **Packet Driver** item on the menu screen.
- 3.If current settings are acceptable, select **Start Installation** and go to step 5. Otherwise, select **Modify Parameters** to make setting changed.
- 4.Move cursor to focus on the field you want to make a change and press <Enter> to select a fit value. When the configuration are set completely, press <Enter> on the **OK** field to exit the screen and go back to step 3.
- 5.Installation program starts to copy related files from diskette to the destination directory and modifies **AUTOEXEC.BAT** under user's agreement.
- 6.Please reboot the computer to load the driver.

#### 2.2.4. Windows for Workgroups 3.11

##### **NDIS3 Driver for Workgroups**

- 1.Run **Windows for Workgroups** and click **Network Setup** icon in Network group.
- 2.In **Network Settings** dialog box, click **Networks...** button to select the network operating system.
- 3.In **Networks** dialog box, check the radio button before **Install Microsoft Windows Network** and **No Additional Network**. Press **OK** to go back the Network Settings screen.
- 4.Click **Drivers...** button to select network driver.
- 5.In **Network Drivers** dialog box, press **Add Adapter...** button to enter **Add Network**

- 
- Adapter** dialog box. Select **Unlisted** or **Updated Network Adapter** and press **OK**.
6. Windows will prompt a **Install Driver** dialog box. In this time, put the driver diskette into floppy drive and press **OK**.
  7. Select the Enhanced mode **NDIS3** for.... string and press **OK**.
  8. Follow Windows instructions to complete the installation and exit Windows
  9. Run **INSTALL.EXE** from root directory of driver diskette.
  10. Select **Windows for Workgroup** in Network Operating System screen.
  11. If current settings are acceptable, select **Start Installation** and go to step 13. Otherwise, select **Modify Parameters** to make settings changed.
  12. Move cursor to focus on the setting you want to make a change and press <Enter> to select a fit value. When the configuration is accepted, press <Enter> on the **OK** field to exit the screen and go back to step 11.
  13. Select **NDIS Server(LAN Manager,...)** as the network server you will attach to and press <Enter> key.
  14. Installation program starts to copy related files to the destination directory and modifies **AUTOEXEC.BAT** and under user's agreement.
  15. Please reboot the computer to have the driver take effect.

### **NDIS2 Driver for Workgroups**

1. Run **Windows for Workgroups** and click **Network Setup** icon in Network group.
  2. In Network Settings dialog box, click **Networks...** button to select the network operating system.
  3. In Networks dialog box, check the radio button before **Install Microsoft Windows Network** and **No Additional Network**. Press **OK** to go back the Network Settings screen.
  4. Click **Drivers...** button to select network driver.
  5. In Network Drivers dialog box, press **Add Adapter...** button to enter **Add Network Adapter** dialog box. Select **Unlisted** or **Updated Network Adapter** and press **OK**.
  6. Windows will prompt a **Install Driver** dialog box. In this time, put the driver diskette into floppy drive and press **OK**.
  7. Select the **Real mode NDIS2 for....** string and press **OK**.
  8. Follow Windows instructions to complete the installation and exit Windows.
  9. Run **INSTALL.EXE** from root directory of driver diskette.
  10. Select **Windows for Workgroups in Network Operating System** screen.
  11. If current settings are acceptable, select **Start Installation** and go to step 13. Otherwise, select **Modify Parameters** to make settings changed.
  12. Move cursor to focus on the setting you want to make a change and press <Enter> to select a fit value. When the configuration is set completely, press <Enter> on the **OK** field to exit the screen and go back to step 11.
-

13. Select **NDIS Server(LAN Manager,...)** as the network server you will attach to and press <Enter> key.
14. Installation program starts to copy related files to the destination directory and modifies AUTOEXEC.BAT under user's agreement.
15. Please reboot the computer to have the driver take effect.

### **ODI Driver for Workgroups**

1. Run **Windows for Workgroups** and click **Network Setup** icon in **Network group**.
2. In **Network Setup** dialog box, click **Networks...** button to select the network operating system.
3. In **Networks** dialog box, check **Install Microsoft Windows Network** and **Others**, thereafter select **Novell NetWare (Workstation Shell, 3.X)** or **Novell NetWare (Workstation 4.0 and above)** and press **OK** to enter the screen of **IPXODI.COM** and **LSL.COM**.
4. Press **OK** to go back the **Network Setup** screen.
5. Click on **Drivers...** button to select network driver.
6. In **Network Drivers** dialog box, press **Add Adapter...** button to enter **Add Network Adapter** dialog box. Select **Unlisted or Updated Network Adapter** and press **OK**.
7. Windows will prompt a **Install Driver** dialog box. In this time, put the driver diskette into floppy drive and press **OK**.
8. Select the **Netware ODI Driver ....** string and press **OK**.

9. Follow Windows instructions to complete the installation and exit Windows.
10. Run INSTALL.EXE from root directory of driver diskette.
11. Select **Windows for Workgroups** in Network Operating System screen.
12. If current settings are acceptable, select **Start Installation** and go to step 13. Otherwise, select **Modify Parameters** to make settings changed.
13. Move cursor to focus on the setting you want to make a change and press <Enter> to select a fit value. When the configuration is set completely, press <Enter> on the **OK** field to exit the screen and go back to step 11.
14. Select **Novell Netware Server** as the network server you will attach to and press <Enter> key.
15. Installation program starts to copy related files to the destination directory and modifies AUTOEXEC.BAT and NET.CFG under user's agreement.
16. Please reboot the computer to have the driver take effect.

### 2.2.5. Windows NT 3.51

1. In Main Group of NT 3.51, open **Control Panel** and click on **Network** icon.
2. In **Network Settings** dialog box, push **Add Adapter...** button. The **Add Network Adapter** dialog box will appear.

3. Choose <Other> requires disk from manufacturer from the network adapter card list and press **Continue.**
4. When **Windows NT** prompts for manufacturer disk, insert driver diskette and press **OK** until the **Network Setting Change** dialog box appears.
5. Restart now to have the card take effect.

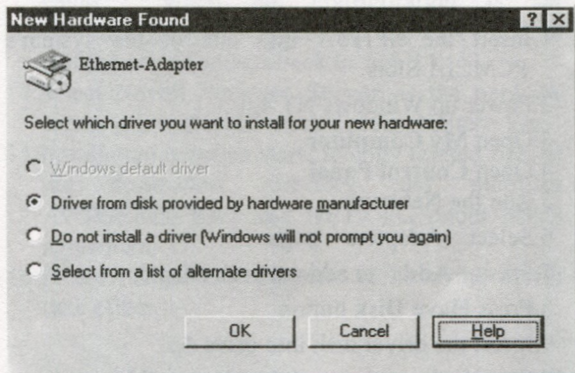
### 2.2.6. Windows NT 4.0

Assumed that the Network Services already installed in the NT 4.0 system.

1. Insert the SP125A into one of the system's PCMCIA Slots
2. Power up Windows NT 4.0
3. Open **My Computer**
4. Open **Control Panel**
5. Run the **Network**
6. Select **Adapters** page
7. Press **Add** to add network adapter
8. Press **Have Disk** button
9. Insert the driver disk into drive A:
10. Specify the path to **A:\** and press **OK**
11. A dialog box will appear to adjust the driver's settings. The resources assignment to the adapter must be unique in the system.
12. Press **OK** when all setting are completed.
13. Press **Close** to complete network setting

### 2.2.7. Windows 95 Installation

1. Assumed that the drivers of PCMCIA slot are well installed. The **System Icon** in the **Control Panel** can report on its functionality. Apart from above mentioned, any questions on this layer need to be taken up with the computer's manufacturer.
2. Insert SP125A PCMCIA Ethernet Adapter into PCMCIA slot. In **New Hardware Found** dialog box, select **Driver from disk provided by hardware manufacturer**.



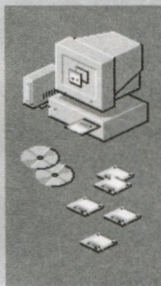
3. Please input the path, **A:\** and insert driver diskette. The driver will be installed and you may be asked for the original Windows 95 CD/disks.
4. For the first time installation, please click **Network icon** in **Control Panel** to add Protocols, Client and Service if you needed

5.Reboot the machine and the card will be fully functional.

### 2.2.8. Windows 98 Installation

- 1.Assumed that the drivers of PC Card slot are well installed. The **System Icon** in the **Control Panel** can report on its functionality. Apart from above mentioned, any questions on this layer need to be taken up with the computer's manufacturer.
- 2.Insert the PC Card into the slot. In **New Hardware Found** dialog box, select **Driver from disk provided by hardware manufacturer**.
- 3.Windows will prompt a **ADD NEW HARDWARE WIZARD** dialog box, then press **Next**.

#### ADD NEW HARDWARE WIZARD



This wizard searches for new drivers for:

Ethernet-Adapter

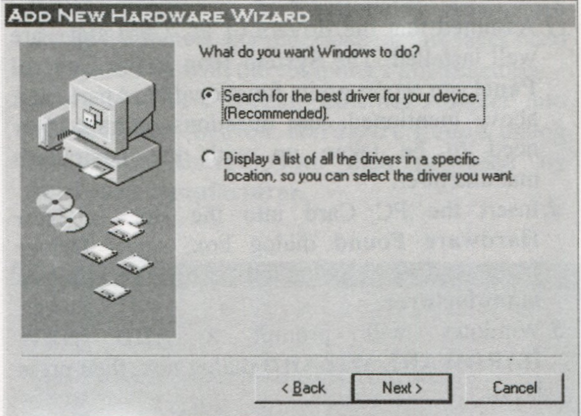
A device driver is a software program that makes a hardware device work.

< Back

Next >

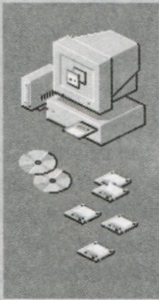
Cancel

4. Then Windows will prompt a **ADD NEW HARDWARE WIZARD** dialog box. In this time, select **Search for the best...** and press **Next**.



5. Windows will prompt a **ADD NEW HARDWARE WIZARD** dialog box. In this time, select **Floppy disk drives** and please insert driver diskette. Then press **Next**, the driver will be installed and you may be asked for the original Windows 98 CD/disks.

#### ADD NEW HARDWARE WIZARD



Windows will search for new drivers in its driver database on your hard drive, and in any of the following selected locations. Click Next to start the search.

☒ Floppy disk drives

☐ CD-ROM drive

☐ Microsoft Windows Update

☐ Specify a location:

D:\win98

Browse...

< Back

Next >

Cancel

6. For the first time installation, please click **Network** icon in **Control Panel** to add Protocols, Client and Service if you needed.

7. Reboot the machine and the card will be fully functional.

### 2.2.9. Artisoft Lantastic 6.0

#### Installation

1. Install LANTASTIC 6.0 first.

2. Run **INSTALL.EXE** from root directory of driver diskette.
3. Select **LANTASTIC 6.0** in Network Operating System screen.
4. If current settings are acceptable, select **Start Installation** and go to step 6. Otherwise, select **Modify Parameters** to make settings changed.
5. Move cursor to focus on each field you want to make a change and press <Enter> to select a fit value. When the configuration is set completely, press <Enter> on the **OK** field to exit the screen and go back the step 4.
6. Installation program starts to copy the related files from diskette to the destination directory and modifies **CONFIG.SYS**, **PROTOCOL.INI**, and **STARTNET.BAT** under user's agreement.
7. Please reboot the computer to have the driver take effect.

## 2.2.10. IBM OS/2 Warp

### **NDIS2 Driver for OS2 Warp**

Before the driver installation, please ensure that the PCMCIA Service was installed and worked properly. If the PCMCIA Service of OS/2 Warp has been enabled already, please jump to portion B for driver installation otherwise please follow the instructions in the following to install the PCMCIA Service.

#### **A. Enable PCMCIA Service of OS/2 Warp**

---

1. In the OS/2 Desktop group, double-click on the **OS/2 System** icon.
2. Double-click on the **System Setup** icon.
3. Double-click on the **Selective Install** icon.
4. Select the **PCMCIA Support** button.
5. Select **PCMCIA** system.  
For example : select IBM ThinkPad 750
6. Click **OK**.
7. Click **Install**
8. Select the source drive and directory  
For Example D:\OS2IMAGE
9. Click **Install**
10. Click **OK**

## **B. Install NDIS2 driver for IBM LAN Server**

### **4.0**

1. In the OS/2 Desktop group, double-click on the **MPTS** icon.
  2. Click on the **Configure** button.
  3. Select the **LAN adapters and protocols** option.
  4. Click on the **Configure** button.
  5. Select the **Other adapters ...** option.
  6. Insert the driver diskette and type the driver path:  
A:\OS2\NDIS2  
Click on the **OK** button.
  7. Select **Micronet SP125A PCMCIA Ethernet Adapter**, and then click on the **Add** button.
  8. Select **IBM OS/2 NETBIOS**, and then click on the **Add** button.
  9. Click **OK**.
  10. Click **Close**.
  11. Click **Exit**.
-

---

## 12.Shutdown and restart your system.

### ODI Driver for IBM OS/2 Warp

Before the driver installation, please ensure that the PCMCIA Service was installed and worked properly. If the PCMCIA Service of OS/2 Warp has been enabled already, please jump to portion B for driver installation, otherwise please follow the instructions in the following to install the PCMCIA Service.

#### A. Enable PCMCIA Service of OS/2 Warp

- 1.In the OS/2 Desktop group, double-click on the **OS/2 System** icon.
- 2.Double-click on the **System Setup** icon.
- 3.Double-click on the **Selective Install** icon.
- 4.Select the **PCMCIA Support** button.
- 5.Select **PCMCIA** system.

For example : select IBM ThinkPad 750

- 6.Click **OK**.
- 7.Click **Install**
- 8.Select the source drive and directory

For Example D:\OS2IMAGE

- 9.Click **Install**
- 10.Click **OK**

#### B. Install Netware Request

- 1.Insert diskette labeled **WSOS2\_1** to diskette drive **A:**
  - 2.Change current drive to **A:**
  - 3.Run **INSTALL.EXE**
  - 4.Select **Installation**
-

5. Select **Requester on workstation...**
6. Set Target Directory  
Assume C:\NETWARE
7. Click **OK**
8. Select **Edit CONFIG.SYS and Copy All Files...**
9. Click **OK**
10. Insert diskette labeled **WSDRV\_1** and Click **OK**
11. Select **NE2000.SYS** driver
12. Click **Continue** button
13. Insert diskette labeled **WSOS2\_1** and Click **OK**
14. Click **Continue** button
15. Select the **SPX Support for OS/2 Sessions**
16. Click **Save** button
17. Click **OK**
18. Click **Copy** button
19. Insert diskette labeled **WSOS2\_2** and Click **OK**
20. Insert diskette labeled **WSOS2\_3** and Click **OK**
21. Insert diskette labeled **OS2UTIL1** and Click **OK**
22. Insert diskette labeled **WSDRV\_1** and Click **OK**
23. Insert diskette labeled **OS2DOC\_1** and Click **OK**
24. Insert PCMCIA Ethernet Adapter driver diskette
25. Close Installation window to exit install
26. Copy following driver to C:\NETWARE directory  
COPY A:\OS2\ODI\LE10ODI.SYS  
C:\NETWARE  
COPY A:\OS2\ODI\LANEN.OS2  
C:\NETWARE
27. EDIT C:\CONFIG.SYS file

---

28.Delete

**DEVICE=C:\NETWARE\NE2000.SYS**

For Example

REM -- ODI-Driver Files BEGIN --

REM DEVICE=C:\NETWARE\NE2000.SYS

REM -- ODI-Driver Files END --

## 29.Add

**DEVICE=C:\NETWARE\LANEN.OS2**

and **DEVICE=C:\NETWARE\LE10ODI.SYS**

For Example

REM -- ODI-Driver Files BEGIN --

DEVICE=C:\NETWARE\LANEN.OS2

DEVICE=C:\NETWARE\LE10ODI.SYS

REM -- ODI-Driver Files END --

30.Save **C:\CONFIG.SYS**

## 31.Shutdown and restart your system.

## 3. GENERAL INFORMATION

### 3.1. NOTES FOR NDIS DRIVER

The following are examples of partial CONFIG.SYS file and AUTOEXEC.BAT for loading SystemSoft Card Services and NDIS2 driver:

Examples of partial CONFIG.SYS file:

```
DEVICE=C:\CARDSOFT\SS365SL.EXE
```

```
DEVICE=C:\CARDSOFT\CS.EXE
```

```
DEVICE=C:\CARDSOFT\CSALLOC.EXE
```

```
        C:\CARDSOFT\CSALLOC.INI
```

```
DEVICE=C:\CARDSOFT\CARDID.EXE
```

```
device=c:\lanman.dos\drivers\ethernet\le10\lanen.exe
```

```
device=c:\lanman.dos\drivers\protman.dos
```

```
        /I:c:\lanman.dos
```

```
device=c:\lanman.dos\drivers\ethernet\le10\le10nds.d
```

```
os
```

Examples of partial AUTOEXEC.BAT file:

```
SET PATH=C:\LANMAN.DOS\NETPROG;%PATH%
```

```
NET START WORKSTATION
```

```
LOAD NETBEUI
```

The Ethernet function configuration information for the DOS NDIS driver is contained in the PROTOCOL.INI file. The section of the PROTOCOL.INI file that contains configuration

---

information for this card must begin with "[LE10NDS2\_NIF]". The valid entries in the file are listed below:

[LE10NDS2\_NIF]

DRIVERNAME - LE10NDS\$

    this line must always be present

IOADDRESS - value

    where value is one of 32 bytes boundary from 0x200 to 0x3e0.

    The leading "0x" for the hex notation is required.

    To have Card Services select the address base from it's pool of available address then use a value of 0.

INTERRUPT - value

    where values is one of the following interrupts:

        3, 4, 5, 7, 9, 10, 11, 12, 15.

    To have Card Services select an available interrupt resource then place a value of 0 at this location.

## 3.2. NOTES FOR PACKET DRIVER

The following are examples of partial CONFIG.SYS file for loading **SystemSoft Card Services** and **Packet Driver**:

Examples of partial CONFIG.SYS file:

    DEVICE=C:\CARDSOFT\SS365SL.EXE

    DEVICE=C:\CARDSOFT\CS.EXE

    DEVICE=C:\CARDSOFT\CSALLOC.EXE

        C:\CARDSOFT\CSALLOC.INI

    DEVICE=C:\CARDSOFT\CARDID.EXE

---

device=c:\tcpip\lanen.exe

device=c:\tcpip\le10pd.sys

### 3.3. NOTES FOR WINDOWS FOR WORKGROUPS DRIVER

The following are examples of partial CONFIG.SYS file and AUTOEXEC.BAT for loading **SystemSoft Card Services** and drivers for **Windows for Workgroups**:

Examples of partial CONFIG.SYS file:

DEVICE=C:\CARDSOFT\SS365SL.EXE

DEVICE=C:\CARDSOFT\CS.EXE

DEVICE=C:\CARDSOFT\CSALLOC.EXE

C:\CARDSOFT\CSALLOC.INI

DEVICE=C:\CARDSOFT\CARDID.EXE

device=c:\wfw311\lanen.exe

DEVICE=C:\WFW311\IFSHLP.SYS

Examples of partial AUTOEXEC.BAT file:

C:\WFW311\NET START

## 4. QUESTIONS AND ANSWERS

This chapter provides a number of examples of Questions(Q:), Causes (C:), and Answers(A:). If your LAN is not functioning properly, look up the problem here, or ask your dealer for technical assistance.

Q:The Card Service cannot enable my card.  
When I run LANEN the error message show Fail to enable PC card

C:No memory space to map the attribute memory of SP125A.

A:If memory management software e.g. EMM386 has been installed, you have to reserve some area in upper memory (C000:0 -- EFFF:F) for attribute memory of SP125A during enabling the card.  
Example: Device=C:\DOS\EMM386.EXE RAM X=D000-D3FF. Reserve D000 - D3FF for attribute memory.

Q:How can I know the SP125A PCMCIA Ethernet Adapter has been enabled or not ?

A:1.If the Card Service is installed, you can check by hearing the beep when card insertion.  
2.Run LANEN /CHK to check, if the card has been enabled. the resources allocated for the

card are shown as below at the last line of display message.

“ IO=xxx    IRQ=nn    Slot=nn”

**Q:**How to enable the SP125A PCMCIA Ethernet Adapter ?

**A:**1.The SP125A PCMCIA Ethernet Adapter can be enabled by the Card Service installed in the laptop directly. The drivers associated with the card in the driver diskette can be run over **Card Service** directly.

2.In case the **Card Service** cannot enable the SP125A, you may run **LANEN** to enable it. After the **LANEN** has been run, either the driver in the driver diskette or the standard NE2000 driver can be used as the LAN drivers.

**Q:**How to make the card work under Systemsoft Card Service ?

**A:**There are some procedures have to do for making the card enabled by Cardsoft.

1.Copy across the LE10.CLB file.

Copy FROM

A:\PCMCIA\CARDSOFT\LE10.CLB

TO

C:\CARDSOFT\LE10.CLB

Depends on where the Cardsoft be saved.

2.Edit the CARDID.INI file and add the library LE10.CLB.

Edit C:\CARDSOFT\CARDID.INI

Find the section which starts "[Libraries]", and add the line

"CardLib=le10.clb"

before any other "CardLib=" lines.

When the card is inserted it will beep. Use CARDCHEK /V to check if the card has been configured correctly.

- 3.If the card cannot work properly, you may edit CARDID.INI again to change the resources allocation.

In [Common] section you may find the strings as following

Lan1Port=300

Lan1IRQ=5

Lan1MemoryBase1=D0

Lan1MemoryBase2=D4

Lan2Port=320

Lan2IRQ=11

Lan2MemoryBase1=D8

Lan2MemoryBase2=DC

You may change the Lan1Port or Lan1IRQ to another value (e.g. Lan1Port=320, Lan1IRQ=11) to request Cardsoft allocate the resources you wanted.

- 4.If the resources cannot allocate properly, you may run \CARDSOFT\CONFIG or edit \CARDSOFT\CSALLOC.INI directly to set the system resources available for allocation. The file content of CSALLOC.INI are listed as below.

# The available resources described by the "MEM=", "IO=", and "IRQ=" lines

## QUESTIONS AND ANSWERS

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# It may have been altered by the "xINCLUDE" and/or "xEXCLUDE" lines below!

# The "MEM=", "IO=" and "IRQ=" lines are provided for Read-Only purposes.

#

MEM=D000-DFFF

IO=100-3F7

IRQ=5,7,9-C,E-F

#

# \*\*\* Resource modifications should be made below this line. \*\*\*

#

RIO=170-177,370-377

MEMEXCLUDE=C000-CFFF,E000-EFFF

IOEXCLUDE=3F8-3FF,2F8-2FF

IRQEXCLUDE=3-4,6,13-14

You may edit the file to guide the Cardsoft which resources are available in your computer.

Q:How to make the card work under Phoenix Card Service ?

A:You have to add a card to PCM. If the card has been added, you may use PCM to modify the resources requested for the card.

- 1.Insert the Ethernet card into PCMCIA slot
- 2.Execute PCM.EXE that supported by Phoenix PCM
- 3.Select the right socket by PageUp, PageDown key
- 4.Choose Configure item by ALT-C.

5. Choose Add Card to List item and Enter for first time or choose Edit Config Parameters for further edition
6. Set the IO range and IRQ for the card
7. Press Enter key and then save the configuration
8. Exit PCM.EXE by Alt-V and select Exit item
9. Reboot

Q: How to make the card work under Award Card Service ?

A: You need to run the 'PC Card Control for Windows' program under Windows. If you do not have Windows, edit the CARDWARE.INI file as indicated below.

Before running PC Card Control for Windows, make sure the Ethernet Adapter card is inserted into one of your PC's sockets.

1. Run 'PC Card Control' for Windows' from the Cardware sub-directory.
  2. Press 'OK' buttons on any card detect errors until you get to the main menu.
  3. Select the 'Cards' option and choose 'Edit'.
  4. Select right Socket and press Enter  
If you already have a device in the Defined box called LE10, go to step (11).
  5. Select 'New Device' under the 'Defined' devices box.
  6. Edit the new device to be named 'LE10'.
  7. Select IO range 1 Base(Hex) = 320, Length = 32 (16 bit).
-

8. Do not alter MEM range 1 or 2.
9. Select IRQ level 11. And OK to make changes.
10. Back on the 'Edit card' screen, highlight the 'LE10' device in the defined devices box.
11. Transfer the LE10 to the 'Associated' box with the 'Include' command.
12. Select OK to complete editing and return to main screen.
13. If the LE10 card is not graphically depicted, choose 'Card' and 'Reconfigure' the socket which contains the LE10 card.

If you still have problems with CARDWARE software try to replace your CARDWARE.INI file with the one supplied on the SP125A PCMCIA Ethernet Adapter Drivers Disk.

In DOS mode, you may use PCCARD /D or DOSCARD /D command to check the resources allocated for the card.

Q: The ODI driver is run successfully but fail to login to the Netware server

C: Frame type incompatible with server or Interrupt miss match.

A: 1. The default frame type for Netware 3.11 and before is 802.3 but it is changed to 802.2 in Netware 4.x and 3.12. You may check the content of NET.CFG to see if the frame type is acceptable by the server. If the frame type cannot accept by server, please edit NET.CFG

---

to change the frame type at client site or add the frame type can be accepted at sever site.

- 2.If you use the NE2000 driver the IRQ specified in NET.CFG must be the same as physical IRQ assignment by Card Service or LANEN. Otherwise you cannot find any server. If you use the drivers supported by the card the IRQ always matched. It means no matter what IRQ value set in NET.CFG, the drivers using the acture IRQ to initialize the driver.

## **5. APPENDIX A: PRODUCT SPECIFICATIONS**

IEEE 802.3 10BaseT, 10Base2

10Mbps speed

Internal buffer memory, No system memory used

NE2000 compatible ODI client, Packet driver and

NDIS version 2.x, 3.x driver supported

### **5.1. Operating Environment**

Novell Netware 3.x, 4.x

Microsoft LAN Manager

Packet Driver Applications

Microsoft Windows for Workgroups 3.11

Microsoft Windows 3.1

Microsoft Windows NT 3.51, NT 4.0

Windows 95

Windows 98

Lantastic 6.0

IBM OS/2 Warp Version 3

## 5.2. Physical

PCMCIA Type II

3.37 in. x 2.128 in. x 0.197 in.

85.6mm x 54mm x 5mm

Weight: 30 g

Power: +5V  $\pm 5\%$ , @150mA

PCMCIA Type II

A media coupler with RJ-45 socket for 10BaseT LAN only or a media coupler with both RJ-45 and BNC connector for either 10BaseT or 10Base2 LAN.



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